

**DRAFT ENVIRONMENTAL ASSESSMENT  
ROYAL AVENUE PUBLIC ACCESS AND PARKING IMPROVEMENTS  
FERN RIDGE PROJECT  
LANE COUNTY, OREGON**

**INTRODUCTION**

The Fern Ridge Project is one of 10 multi-purpose water projects operated by the Corps of Engineers (COE) in the Willamette Valley. It is located in Lane County, Oregon about six miles west of the Eugene/Springfield metropolitan area (Figure 1). Congress, in the Flood Control Act adopted on June 28, 1938 authorized the Fern Ridge Project. The Fern Ridge Dam crosses the Long Tom River 23.6 miles upstream of its confluence with the Willamette River, and also impounds tributaries of the Long Tom, including Coyote Creek and Amazon Creek. Authorized project purposes include flood control, irrigation, and navigation. Secondary project purposes include recreation, fish and wildlife management, and water quality.

**PURPOSE AND NEED**

The west end of Royal Avenue at the Fern Ridge Project boundary is one of the most important public access points to lands along the east shore of Fern Ridge Lake. It provides access for hunters during authorized seasons as well as for hikers, and wildlife viewers the year round. The end of Royal Avenue (a county maintained road) provides the only practical public access to the Fisher Butte and Royal-Amazon Management Units as well as the exposed lakebed during the winter months. U.S. Bureau of Land Management (BLM) lands located along the east side of the Project's Royal-Amazon unit are also frequently accessed from this point. However, this area lacks adequate and safe parking for vehicles. Currently, vehicles must be parked on a narrow, road right-of-way bordered by abrupt, steep ditches.

Cooperative management and development within the Fisher Butte and Royal-Amazon management units by the COE and the Oregon Department of Fish and Wildlife (ODFW) since the early 1980s have resulted in the construction of over 500 acres of managed wetland impoundments and other topographic features to diversify marsh habitat. Recent dike construction and vegetation management efforts within the area have greatly increased the accessibility of the area by the public and have made significant improvements in the diversity and quality of wetland habitat. Reed canary grass (*Phalaris arundinacea*) conversion efforts and water level management within impoundments has attracted a variety of migratory birds to the area and the access has become one of the better known marsh bird observation sites in the south Willamette Valley. The end of Royal Avenue provides ready access to over eight miles of impoundment dike top, old coast Highway roadbed, and the boundary trail corridor on project lands. This represents the most extensive network of hiking trails on the Project and provides an important extension of the opportunities provided in the West Eugene Wetlands complex.

COE and ODFW staffs have come to rely heavily upon the gated access and the old roadbed across the lake for construction access and routine O&M activities on the

lakebed and associated dikes and features. This area serves as a valuable control point for hunters and other users entering Project lands. At present the access site is little more than a 30-foot wide stretch of county roadway ending immediately in front of the existing tubular steel gate bordered on either side by an abrupt roadside ditch about 2 feet in depth. The only place for vehicle parking is in the roadway itself, often making it difficult to keep a lane clear to access the gate. Turning vehicles around often results in losing a wheel or two in one of the adjacent ditches. There are no sanitation facilities currently maintained at the site.

Public safety has long been an issue at this site since there have been nearly a dozen incidents in the past 20 years in which vehicles traveling west on Royal Avenue have collided with the existing gate at the Project boundary. These incidents typically occur at night or under conditions of limited visibility. Despite efforts to improve the breakaway characteristics and visibility of the gate and warn drivers of the dead end, these incidents persist.

The above observations obviate the need for Corps and ODFW managers to consider measures to make improvements to the site. Safety issues for visitors may be mitigated, in part, by removing the concentration of activity and associated property from the direct roadway alignment. Additionally, there appears to be a significant opportunity to develop a more attractive and functional public access feature that will improve visitor experience and help promote the ongoing stewardship program within the Fern Ridge Wildlife Area and adjacent Project lands.

Recent experiences observing and conducting field trips to the area suggest that it would be desirable to have an appropriately sized parking area to facilitate group and individual use of the area. Group use at present is hampered because of limited vehicle parking and maneuvering space. Parking facilities should be able to accommodate up to 10 vehicles, permit tour or school bus turn around, and provide for safe ingress and egress out of the travel lanes of the existing roadway.

## **PROPOSED ACTION AND ALTERNATIVES**

### **Proposed Action**

The proposed action is the construction of an access and parking area and several infrastructure improvements. Planned activities include the creation of a graveled parking lot, installation of a vault toilet, installation of an information kiosk, and the construction of a viewing platform (Figure 2).

The proposed parking area is located in a degraded, native wet prairie system that has been destroyed by reed canary grass invasion. Construction of the access improvements will involve mowing and/or grubbing reed canary grass from an approximate ¼ acre rectangular area (80' x 130') situated immediately north of Royal Avenue and just inside the Project boundary fence. A temporary construction fence will be installed around the edge of this clearing. A 6,000 square foot rectangular area measuring 60' x 100' will be covered by geotextile fabric and covered with approximately 12 inches of rock base

consisting of quarry spalls and/or 6" open quarry rock. Materials will be imported by end dump truck and spread and compacted with a tracked dozer and vibratory roller/compactor. Approximately 40 linear feet of 18 inch ADS double walled culvert pipe will be installed in the invert of the ditch along the north side of Royal Avenue. One inch or less gravel will be used to bed the pipe. A 4-inch thick leveling course of 1-1/2" minus quarry rock will be used to cap the parking lot fill and establish grade with the existing pavement on the north road shoulder.

Concurrent with preparation of the parking area base, two 6" steel pipe gates 25 feet and 20 feet in width will be installed at the south east and north east ends of the parking area respectively. These gates will function to regulate public vehicle access into the site and O&M access into the management unit to the north along the existing Project boundary/fire line. The existing gate on Royal Avenue will remain.

The perimeter of the parking area fill will be delineated by a combination of 36" diameter basalt boulders and/or 6" tubular steel post barriers on spacing sufficient to preclude motorized vehicles. Native woody vegetation will also be established on the parking area perimeter to facilitate this objective.

An approximate 400 square foot area within the southwest corner of the parking area will be delineated for trailhead information and interpretive exhibit purposes. A low profile kiosk with multiple display surfaces will be installed at this location.

At the north end of the proposed parking area, just outside the vehicle delineation barrier and adjacent to the gated fire line access, a single CXT concrete vault toilet will be installed with the floor level approximately 6 inches above grade. Excavation about 4 feet below grade will be necessary for the below ground vault installation (10 to 12 cubic yards). Excavated material will be disposed off site in an upland area.

A wooden viewing platform of approximately 200 square feet surface area will be constructed on the existing dike top at the northeast corner of Cell #2 (1999 Section 1135 Project) inside the Fisher Butte Unit. The floor level of the elevated platform will be approximately 6 feet above the ground (dike top). Support structure will be made of treated posts set in concrete. Stringers and decking, stairway and perimeter guardrail will be of treated 2" – 3" planking, spiked and/or bolted together. Interpretive exhibits may be installed on or adjacent to the structure. The viewing platform will be located along the southwest edge of a bank of riparian vegetation consisting of willow and cottonwood, which will help screen the structure. Additional plantings of native willow around the structure will be established to conceal it from view and improve its function as a blind.

To offset the loss of 0.15 acres of wetlands at the project site, it is proposed to enhance at least two acres of nearby wetlands to restore native wetland vegetation and improve wildlife habitat. Two separate sites have been identified for the restoration efforts. Both proposed sites are infested by reed canary grass. The restoration plan will control reed canary grass using several techniques including mechanical and physical control, water management, and spot chemical treatment. Native plants from the soil seed bank or from

nearby plants are expected to re-colonize the site naturally. Supplemental planting and seeding of native plant materials may augment the natural establishment.

### **No Action Alternative**

Under the no action alternative, there would be no parking area constructed or access improvements. Parking for visitors and staff would continue to be limited to the narrow roadway. With projected increases in recreation use, safety concerns related to inadequate parking and congestion will likely increase. Current access issues will continue at the site including vehicle accidents, lack of adequate and safe parking areas, lack of sanitary facilities, and the lack of interpretive and contact structures such as the kiosk and viewing platform.

## **AFFECTED ENVIRONMENT**

### **Construction Activities**

The proposed site for the parking area, vault toilet, and kiosk is currently a degraded wetland (wet prairie) situated just above the pool influence of the reservoir on the boundary of the Project. The site has been invaded by and is dominated by reed canary grass. The area has been highly disturbed. Several decades ago and prior to construction of the Fern Ridge Project, the site was associated with agriculture. Farming practices, livestock grazing, and road construction have previously impacted the site.

Approximately 0.15 acre of degraded wet prairie will be impacted by fill activities to construct the parking area. The area will be mowed and/or grubbed prior to the placement of the rock and gravel base. The rock will be compacted by a tracked dozer and roller/compactor. A culvert will be installed in the invert of the road ditch along the north side of Royal Avenue to allow access to the parking area. In addition, a concrete vault toilet will be installed at the parking access area and will require excavation of approximately 12 cubic yards of materials. The excavated material will be disposed off site in an upland area. A low profile kiosk with multiple display surfaces will be installed within the parking area and will be used for trailhead information and interpretive displays.

A wooden viewing platform will be constructed on the existing dike top inside the Fisher Butte Unit. Plantings of native willow will be established around the viewing structure to conceal it from view and improve its function as a blind.

### **Mitigation Area**

The proposed parking access area will permanently fill 0.15 acre of a highly disturbed wetland. Wetland functions at the proposed fill area will be lost. To compensate for the lost wetland functions, two separate, degraded wetland sites totaling at least 2.0 acres will be enhanced to re-establish wetland functions.

The first site is located approximately 1,000 feet southwest of the proposed parking area, situated between the confluence of the Cell #1 dike and the old Royal Avenue roadbed. The area is just within the full pool hydrologic influence of the lake and is dominated by

a thick infestation of reed canary grass. The objective of this enhancement prescription will be to eliminate or reduce the *Phalaris* component and promote a more diverse emergent native plant community, representatives of which are currently present in the vicinity, i.e., *Typha sp.*, *Eleocharis sp.*, *Polygonum sp.*, *Sagittaria latifolia*, *Scirpus sp.*, *Alisma plantago*, *Smartweed*, *Sparganium sp.*, *Carex sp.*, *Juncus sp.*, and *Spiraea douglasii*. The initial *Phalaris* suppression will be accomplished by a repetitive spring and summer mowing followed by a fall herbicide application (2% glyphosate). The second season treatment will consist of follow up spot treatment with herbicide to address seedbank germination and control of resistant *Phalaris*. Disking may also be used selectively to control regrowth if conditions warrant. Water level management on the site may also be useful in suppressing reed canary grass. The results of previous experimentation work within the unit indicates that native plant materials such as those listed above that occur within or adjacent to the site are available to colonize the site. Manual broadcast seeding and/or plugging and transplanting plant materials from nearby locations may augment this natural establishment.

The second site to be treated is located approximately 0.7 mile north of the proposed parking area along the emergent transition zone between the full conservation pool of the reservoir and the wet valley bottom prairie of the Royal Amazon Unit of the RNA. The site is currently dominated by *Phalaris*. It was selected because of its potential to be restored to a wet prairie plant community dominated by *Deschampsia caespitosa* and other native grasses and forbs typically associated with the adjacent RNA. This site has been more recently colonized by *Phalaris* (within the past 20 to 30 years) and generally has not formed a thick root mat more typical of sites farther west into the emergent zone of the reservoir. The *Phalaris* conversion prescription at this site, which evidence suggests has not been disturbed by agricultural tillage, will involve the placement of a polypropylene geotextile shade cloth fabric on the surface subsequent to a spring/early summer mowing. The fabric will be left in place for approximately 15 months until the fall of the subsequent growing season. Upon removal, the site will be seeded and/or plugged with a native wet prairie plant assemblage prescribed by the Project Botanist. Follow up spot treatments with herbicide will be made to control *Phalaris*.

## **ENVIRONMENTAL EFFECTS**

### **Physical**

Under the proposed action, there will be a permanent loss of 0.15 acres of wetlands due to the construction of the parking area and access improvements. This location has been impacted previously by farming, livestock grazing, and road construction activities. The site is currently dominated by reed canary grass. This highly impacted and degraded wet prairie site provides few wetland functions or wildlife habitat.

However, to compensate for the 0.15 acre of wetland lost, two separate mitigation areas totaling at least two acres will be enhanced and restored by controlling reed canary grass, restoring native wet prairie plant species, and providing high-quality wildlife habitat. Wetland functions lost at the proposed parking area will be restored, increased, and re-established in the two nearby areas. These compensatory actions will re-establish

wetland functions on approximately 2.0 acres resulting in a net gain of approximately 1.85 acres of native wet prairie.

### **Biological**

Bald eagle, Fender's blue butterfly, golden Indian paintbrush, Willamette daisy, Howellia, Bradshaw's lomatium, and Kincaid's lupine are the federally listed endangered and threatened species that may occur within the area of Fern Ridge Reservoir.

Multiple plant surveys have been conducted for this project. No listed plant species or plants of conservation concern were found within the footprint of the proposed project. Reed canary grass is the dominant plant species at the proposed project site and mitigation sites.

The proposed action will not affect any federally listed endangered or threatened species or critical habitat.

### **Cultural**

The Fern Ridge Project has been intensively surveyed for cultural resources during previous studies. No known cultural resources are present in this area.

### **COORDINATION**

This Environmental Assessment (EA) will be distributed for 30-day public review. Review comments will be requested from federal and state agencies as well as various property owners and interested publics. Agencies the document has been sent to include:

U.S. Environmental Protection Agency  
U.S. Fish and Wildlife Service  
Oregon Department of Environmental Quality  
Oregon Department of Fish and Wildlife

### **CONSULTATION REQUIREMENTS**

- a. Clean Water Act of 1977 (33 USC 1344): In compliance with the Clean Water Act, a Section 404 (b) (1) Evaluation has been prepared and a state water quality (401) certification has been requested from the State of Oregon concurrent with the public review of this Environmental Assessment.
- b. Coastal Zone Management Act of 1972, as amended: Not applicable.
- c. Endangered Species Act (ESA) of 1973, as amended: The proposed action would have no effect on threatened or endangered species. This "no effect" determination has been coordinated with appropriate Federal resource agencies.
- d. Fish and Wildlife Coordination Act: The proposed action has been coordinated with the U.S. Fish and Wildlife Service in compliance with this Act concurrent with the review of this EA.
- e. Wild and Scenic Rivers Act: Not applicable.
- f. Marine Protection, Research and Sanctuaries Act of 1972, as amended: Not applicable.

- g. Cultural Resources Acts: Consultation for compliance for Section 106, National Historic Preservation Act as amended, is being obtained.
- h. Executive Order 11988, Flood Plain Management, 24 May 1977: The proposed action would have no adverse effect on flood plains or flood heights.
- i. Executive Order 11990, Protection of Wetlands, 24 May 1977: The proposed action would have an adverse effect on 0.15 acre of wetlands. Restoration measures are proposed on 2.0 acres of wetlands to compensate for the wetland loss.
- j. Analysis of Impacts on Prime and Unique Farmlands: The proposed work would not impact any prime or unique farmlands.
- k. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The proposed action would not be affected by the requirements of this Act.
- l. Migratory Bird Treaty Act. The proposed action is in compliance with this act.

#### **LITERATURE CITED**

U.S. Army Corps of Engineers. 1988. Upper Willamette Valley Projects, Master Plan for Resource Use. Part 2A, Fern Ridge Lake. Portland District. Portland, Oregon.

[illegible]

### FIGURE 1. FERN RIDGE LOCATION MAP





FIGURE 2. OVERVIEW OF PROPOSED PROJECT AREA